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10/669,610	09/23/2003	Ivano Gagliardi	CM2699	5608
27752 7590 07/08/2008 THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION - WEST BLDG. WINTON HILL BUSINESS CENTER - BOX 412 6250 CENTER HILL AVENUE CINCINNATI, OH 45224				
EXAMINER				
HAND, MELANIE JO				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/669,610  
Filing Date: September 23, 2003  
Appellant(s): GAGLIARDI ET AL.

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Gary J. Foose  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 18, 2008 appealing from the Office action mailed November 6, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

EP 1013291 A1

LUIZZI et al

6-2000

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 5-7, 9, 11, 12, 14, 15, 19-21, 23-25 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luizzi ('291).

With respect to **Claims 1,19**: Luizzi teaches sanitary napkin 1 having topsheet 10, backsheet 20 and a patterned coated layer of absorbent adhesive 50 (absorbent element) located between said topsheet and said backsheet. Luizzi teaches that the adhesive 50 is comprised of a liquid absorbent thermoplastic composition and therefore is capable of functioning as a storage layer. The liquid-absorbing thermoplastic composition comprises a polymeric base material having hydrogel particles (i.e. particles of water-insoluble, water-swellaable absorbent material). ('291, ¶¶ 0009,0015,0017) Luizzi teaches that the adhesive composition has an absorbent capacity of approximately 10 g/g, thus satisfying the limitation of claim 1. ('291, ¶ 0033) As can best be seen in Fig. 3, Luizzi teaches a coating pattern for said liquid absorbent thermoplastic adhesive comprised of a plurality of spaced apart, unattached zones. Additionally, with respect to claim 19, said liquid thermoplastic adhesive composition is comprised of aqueous, liquid-absorbing thermoplastic hydrogel material present in an amount between 1-60% by weight of the total weight of the layer 50 formed with said adhesive composition (absorbent element). ('291, ¶ 0009)

Luizzi does not explicitly teach the distance that a zone is spaced from an adjacent zone. Luizzi teaches in ¶0018 that the size of an absorbent particle is less than 150 microns. The distance of separation between zones is considered herein to be a result-effective variable since such distance is limited by the width of the article taught by Luizzi. Since an adhesive zone is at least as large as a superabsorbent particle, and adhesive zones as taught in Fig. 6 of Luizzi are not immediately adjacent one another, it would be obvious to one of ordinary skill in the art to modify the article of Luizzi such that the adhesive zones are between 0.5 mm and 10

Art Unit: 3763

mm apart with a reasonable expectation of success. It has been held that discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. *In re Boesch and Slaney*, 205 USPQ 215 (C.C.P.A. 1980)

With respect to **Claim 2**: Liquid thermoplastic adhesive 50 is comprised of aqueous, liquid-absorbing thermoplastic hydrogel material present in an amount between 1-60% by weight of the total weight of the layer formed with said adhesive composition (absorbent element). ('291, ¶ 0009)

With respect to **Claims 3,5,21,23**: With respect to claims 3 and 21, since zones of adhesive also comprise other particles, the area covered by each adhesive zone would be at least the area of one SAP particle, or at least  $0.007 \text{ cm}^2$ , based upon the SAP particle diameter taught by Luizzi of less than 150 microns, or less than 0.015 cm. ('291, ¶ 0018). With respect to claims 5 and 23, as can best be seen from any of Figs. 1, 3, 6 or 10, the patterned absorbent element layer 50 of thermoplastic adhesive extends substantially the entire length and width of the article and would clearly therefore have a total surface area greater than  $1 \text{ cm}^2$ .

With respect to **Claims 6,7,24,25**: As can best be seen in Fig. 1, Luizzi teaches that the patterned absorbent element layer 50 comprises a plurality of adhesive dots (claims 7,25) that are regular in shape (claims 6,24).

With respect to **Claims 9,20**: Luizzi teaches that the adhesive composition has an absorbent capacity of approximately 10 g/g, thus satisfying the limitations of claims 9 and 20. ('291, ¶ 0033)

With respect to **Claim 11**: Luizzi teaches that the adhesive absorbent element layer 50 is comprised of a liquid absorbent thermoplastic composition and therefore is capable of functioning as a storage layer. Therefore Luizzi teaches a storage layer consisting of said liquid absorbent thermoplastic composition.

With respect to **Claim 12**: Liquid thermoplastic adhesive 50 is comprised of aqueous, liquid-absorbing thermoplastic hydrogel material present in an amount between 1-60% by weight of the total weight of the layer formed with said adhesive composition (absorbent element). ('291, ¶ 0009) The composition comprises 40 wt% superabsorbent particles (the hydrogel particles), therefore satisfying the limitations of claim 12.

With respect to **Claims 14,31**: Luizzi teaches a transfer layer 470 (Fig. 5), i.e. a fluid distribution layer, sandwiched between the topsheet and absorbent adhesive fluid storage layer 50. ('291, ¶ 0024)

With respect to **Claims 15,32**: Since Luizzi teaches that adhesive coating 50 can also be disposed between cover layer 10 and core 30, which is comprised of superabsorbent fibers, the absorbent element 50 functioning as a storage layer overlies at least one fibrous layer.

#### **(10) Response to Argument**

Appellant's arguments filed April 18, 2008 have been fully considered but they are not persuasive.

With respect to arguments regarding claims 1 and 19: Appellant argues that Luizzi fails to teach or suggest spaced apart zones that are spaced apart from each other by a distance of between 0.5 mm and 10 mm. Appellant argues first that Luizzi teaches a single rectangular zone and not a plurality of spaced apart zones. This argument has been addressed repeatedly but will be addressed herein as a courtesy. There are no limitations in claim 1 that preclude the individual dots of adhesive cited against the claimed zones that are taught by Luizzi and contained within the instant rectangular zone from defining zones themselves. Thus, they meet the limitation of a plurality of spaced apart zones. Appellant further argues that the spacing between adjacent zones is not a result effective variable and the Office action does not state what the recognized result is. Appellant has not disclosed any improvement or superior result in association with this range of spacings. A recognized result of different spacings between zones is a difference in degrees or strengths of adhesion. The greater the spacing, the less the amount of zones because they must still be held within the rectangular region as disclosed by Luizzi in the figures. The less the amount of zones, the lesser the degree or strength of adhesion.

With respect to arguments regarding claims 2, 5-7, 11, 12, 14, 15, 20, 23-25 and 31: Appellant's arguments with regard to dependent claims 2, 5-7, 11, 12, 14, 15, 20, 23-25 and 31 have been fully considered but are not persuasive, as appellant's arguments depend entirely on arguments regarding the rejection of claim 2, 5-7, 11, 12, 14, 15, 20, 23-25 and 31, which have been addressed *supra*.

With respect to arguments regarding claims 3 and 21: Appellant argues that the Office action does not provide any citation from Luizzi for teaching SAP particle areas or provide any basis for computing the stated area of SAP particles. Luizzi teaches a particle size for the instant SAP particles within the dots of adhesive-absorbent composition that the zones are

defined by. The term "particle size" was interpreted by examiner to be referring to a diameter since the diameter is what is widely understood as the meaning of particle size in the polymer fiber art. Luizzi teaches superabsorbent fibers which are cylindrical. Therefore, the area is going to be at least as large as the area of the circular base of the cylindrical fiber. The area of that circular base is obtained by using the formula  $Area = \pi(D^2/4)$  and inserting the particle size/diameter range of less than 150 microns, or less than 0.015 cm, taught by Luizzi. Hence, the stated area range of at least  $0.007 \text{ cm}^2$  is obtained. Appellant further argues that the average particle size of SAP is not related to the area of a zone of the instant thermoplastic composition, i.e. the adhesive-absorbent composition of Luizzi. This is not persuasive because the zones are formed by dots of adhesive-absorbent composition. The composition contains SAP fibers mixed thoroughly throughout the composition, therefore any dot/zone of adhesive composition will have at least one SAP particle or fiber therein. Therefore, since the composition is not entirely consisting of SAP, the area of a zone/dot will be at least as large as the at least one SAP particle present in the zone/dot. Thus, it is still examiner's position that there is a relation between particle size and zone size in the article of Luizzi.

With respect to arguments regarding claim 9: Appellant argues that because the Office failed to cite any portion of the Luizzi reference that meets the limitation of an article wherein the entire article has a total absorption capacity of at least 1 gram. The Office cited paragraph 0033 of Luizzi which includes Table 1, which discloses the absorbent capacity per gram of absorbent of the composition as 10.3 g/g. Since appellant discloses an article simultaneously having an absorbent capacity of 1 gram/ gram material and a total capacity of 1 gram, appellant is effectively disclosing an embodiment in which there is one gram of absorbent present. Applying this amount of material to the teachings of Luizzi, an amount of the instant liquid composition having one gram of absorbent material will yield a total absorption capacity of 10.3 g/g material \*



Art Unit: 3763

1 g material, or at least 10.3 grams for the entire article including the capacity of the instant storage layer. Therefore, the article of Luizzi renders the limitation of claim 9 obvious.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Melanie J Hand/

Examiner, Art Unit 3761

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